

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-31, 33-52, and 55-65. Please amend claims 32 and 53, and add claims 66-105. Below are the now-pending claims.

1-31. (Cancelled)

32. (Currently Amended) A data unit comprising: a
a data card comprising

a non-magnetic substrate ~~having first and second edges and a data surface region therebetween wherein said substrate comprises at least one layer comprising a non-magnetic magnetic material layer for storing magnetic signals;~~

a data card reader comprising

a base;

a substrate support, configured to support said data card substrate, mounted to the base for controlling movement of the data card along a first path; and

first and second data head support surfaces positioned at opposite ends of a second path and adjacent to said substrate support, said first and second paths being transverse to one another; and

a data head drive mounted to the base, the data head drive comprising a data head reciprocally movable along the second path, ~~said data head comprising a data head surface which contacts said first and second data head support surfaces as said data head moves along the opposite ends of said second path including over the first and second data head support surfaces,~~ wherein movement of the data card along the first path

positions the data region of the data card for signal communication with the data head during the movement of the data head along the second path.

33-52. (Cancelled)

53. (Currently Amended) A card and card writer/reader system comprising:

an encodeable card having comprising

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~~a body having upper and lower surfaces and side and end edges, said body including on at least one of said upper and lower surfaces a data storage section, said card being adapted to interact with a data processing station when said card and said data processing station are moved relative to each other to at least one of write encoding signals in said data storage section and read encoded signals from said data storage section, said data storage section including~~

a non-magnetic substrate;

~~at least one~~ a layer of high density magnetic storage material for storing data, and

~~a diamond like hardness,~~ an abradeable protective coating formed ~~on~~ over said at least one layer of the high density magnetic storage material layer and being selected to have a thickness between a maximum thickness which would materially attenuate encoding and encoded signals passing between said high density magnetic storage material layer and a ~~transducer~~ data head and a minimum thickness enabling said protective coating to be abraded by usage in an ambient

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natural atmosphere operating environment for
~~removing therefrom a known quantity of the~~
~~protective coating; and~~
a card writer/reader comprising

a writer/reader having a transducer data head for
at least one of writing encoding signals in said data
~~storage section~~ high density magnetic storage material
layer and reading encoded signals from said data
~~storage section~~ high density magnetic storage material
layer during relative movement of said card relative
~~to the data processing station to enable data flow~~
~~between said data storage section and said transducer~~
said data head and said high density magnetic storage
material layer; and

a moveable card support to which the non-magnetic
substrate is coupled during said writing or reading,
said card support being moveable in a direction
perpendicular to the relative movement of said data
head and said high density magnetic storage material
layer.

54-65. (Cancelled)

66. (New) The data unit of claim 32, wherein the first and second paths are perpendicular.

67. (New) The data unit of claim 66, wherein the data card reader further comprises a cleaning roller adapted to clean the data card.

68. (New) The data unit of claim 66, wherein the data card reader further comprises a means for cleaning the data card.

69. (New) The data unit of claim 66, wherein the data card reader further comprises a data card cleaner coupled to the base.

70. (New) The data unit of claim 66, wherein the data head contacts the data card during the signal communication.

71. (New) The data unit of claim 70, wherein the data head contacts the first and second data head support surfaces during movement of the data head along the second path.

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72. (New) The data unit of claim 70, wherein said magnetic material layer comprises a thin film layer of high density, high coercivity magnetic material.

73. (New) The data unit of claim 72, wherein the data card further comprises an abradable protective coating over the magnetic material layer.

74. (New) The data unit of claim 73, wherein said protective coating comprises at least two layers, wherein one of said layers includes a magnetically permeable, magnetically saturable material and another of said layers is a non-magnetic friction reducing layer formed over the magnetically permeable, magnetically saturable material.

75. (New) The data unit of claim 74, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

75. (New) The data unit of claim 73, wherein said protective coating comprises a magnetically permeable, magnetically saturable material.

76. (New) The data unit of claim 75, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

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77. (New) The data unit of claim 73, wherein the data card reader further comprises a data card cleaner coupled to the base.

78. (New) The data unit of claim 66, wherein the data head does not contact the data card during the signal communication.

79. (New) The data unit of claim 78, wherein said magnetic material layer comprises a thin film layer of high density, high coercivity magnetic material.

80. (New) The data unit of claim 79, wherein the data card further comprises an abradable protective coating over the magnetic material layer.

81. (New) The data unit of claim 80, wherein said protective coating comprises at least two layers, wherein one of said layers includes a magnetically permeable, magnetically saturable material and another of said layers is a non-magnetic friction reducing layer formed over the magnetically permeable, magnetically saturable material.

82. (New) The data unit of claim 81, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

83. (New) The data unit of claim 80, wherein said protective coating comprises a magnetically permeable, magnetically saturable material.

84. (New) The data unit of claim 83, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

85. (New) The data unit of claim 80, wherein the data card reader further comprises a data card cleaner coupled to the base.

86. (New) The data unit of claim 32, wherein the second path is arcuate.

87. (New) The data unit of claim 86, wherein said magnetic material layer comprises a thin film layer of high density, high coercivity magnetic material.

88. (New) The data unit of claim 87, wherein the data card further comprises an abradable protective coating over the magnetic material layer.

89. (New) The data unit of claim 88, wherein said protective coating comprises at least two layers, wherein one of said layers includes a magnetically permeable, magnetically saturable material and another of said layers is a non-magnetic friction reducing layer formed over the magnetically permeable, magnetically saturable material.

90. (New) The data unit of claim 89, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

91. (New) The data unit of claim 88, wherein said protective coating comprises a magnetically permeable, magnetically saturable material.

92. (New) The data unit of claim 91, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

93. (New) The data unit of claim 88, wherein the data card reader further comprises a data card cleaner coupled to the base.

94. (New) The system of claim 53, wherein said protective coating comprises at least two layers, wherein one of said layers includes a magnetically permeable, magnetically saturable

material and another of said layers is a non-magnetic friction reducing layer formed over the magnetically permeable, magnetically saturable material.

95. (New) The system of claim 94, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

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96. (New) The data unit of claim 53, wherein said protective coating comprises a magnetically permeable, magnetically saturable material.

97. (New) The data unit of claim 96, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said at least one magnetic material layer, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

98. (New) A data unit for communicating signals with a data card including magnetic material for storing magnetic signals, said data unit comprising:

a support that receives the data card and to which the said data card is coupled, the support being operable to move the data card along a first path; and

a data head operable to communicate the signals with the magnetic material, the data head being reciprocally movable along a second path perpendicular to the first path.

99. (New) A data unit comprising:
a data card including a magnetic material;
a data head operable to communicate signals with the magnetic material;
a support that receives the data card and to which the data card is coupled during the communicating of the signals,
wherein the support is operable to move the data card along a first path, and the data head is reciprocally movable along a second path perpendicular to the first path.

100. (New) The data unit of claim 99, wherein said magnetic material comprises a thin film layer of high density, high coercivity magnetic material.

101. (New) The data unit of claim 100, wherein the data card further comprises a protective coating over the magnetic material.

102. (New) The data unit of claim 100, wherein said protective coating comprises at least two layers, wherein one of said layers includes a magnetically permeable, magnetically saturable material and another of said layers is a non-magnetic friction reducing layer formed over the magnetically permeable, magnetically saturable material.

103. (New) The data unit of claim 102, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said magnetic material, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.

104. (New) The data unit of claim 100, wherein said protective coating comprises a magnetically permeable, magnetically saturable material.

105. (New) The data unit of claim 104, wherein the data card further comprises a non-magnetic material layer positioned between the protective coating and said magnetic material, said magnetically permeable, magnetically saturable material being responsive through said non-magnetic layer to produce a magnetic image field.
